## REMARKS

### Introduction

Claim 1 of the application is being amended. The application is believed to be in patentable condition as currently standing. A Declaration under 37 C.F.R. §1.132 in support of patentability accompanies this Response. Reconsideration is respectfully requested.

### Rejections under 35 U.S.C. §112

The Examiner has rejected claim 1 under 35 U.S.C. §112, first paragraph as containing subject matter which was allegedly not described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor at the time the application was filed had possession of the claimed invention. More specifically the Examiner states:

> **Applicant amended claim 1 to add the limitation "wherein said ingredient possesses a leach rate greater than twenty-five percent". The limitation is not supported by the original disclosure. A rate greater than twenty five percent includes any rate above 25. The specification discloses one rate of 85%; there is no disclosure of any other rate. There is not disclosure of any range of leach rate; there is no evidence in the specification to indicate the claimed ingredient encompasses rates such as 34, 58, 96, 44 etc. . . A disclosure of one rate does not provide support for the range that is now claimed.**

The rejection is respectfully traversed. Applicant has amended claim 1 to exclude the limitation to which the Examiner has objected. Applicant feels however, that the limitation was proper and is supported by the specification as clearly a leach rate greater than 25% is shown. In

order to expedite prosecution, however, Applicant has removed this limitation. Reconsideration is therefore respectfully requested.

**Rejections under 35 U.S.C. §102**

The Examiner has rejected claims 1-11, 13-25, and 27-28 and 31 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,792,456 to Katz et al. The Examiner refers to paragraph 4 of the previous Office Action, which states:

> **Katz et al. disclose a leavening system comprising of gluconodelta-lactone and sodium bicarbonate. One of the components is coated with a partially hydrogenise vegetable oil. The acid can be coated or the sodium bicarbonate can be coated. The preferred encapsulated gluconodelta-lactone comprises by weight 48-72% glucono-delta-lactone coated with 28-52% partically hydrogenated vegetable oil. The leavening system is used in bread dough. (See col. 3, lines 1-25 and example 3)**
>
> **Katz et al disclose coating leavening ingredient with hydrogenated vegetable oil which is the same coating material as claimed; thus, it is inherent the Katz et al composition has the properties as claimed. With respect to claims 7-9 and 21-23, if said ingredient refers to the coating material, the range disclosed by Katz et al falls within the range claimed. If said ingredient refers to the leavening agent, then the range disclosed by Katz et al also falls within the claimed range.**

The rejection is respectfully traversed.

By way of background and with reference to the specification, it is known to use coated leavening agents as an ingredient in a dough composition. An acid or base is encapsulated by a coating which allows release of the agent by one of a variety of activation mechanisms. Fluid bed encapsulating techniques had been proven to be the most desirable coating technique for

leavening agents in the prior art. This procedure is discussed in detail in the accompanying declaration. It is further stated in the Declaration that it is well-known by those of skill in the art that the referenced Durkote® products in Katz are encapsulated by fluid bed techniques.

Spray chilling is a method of coating a particulate which does not provide a fluid-tight encapsulation. Spray chilling a particulate, such as an ingredient for leavening a dough composition, has not been the conventional practice, as the spray-chilled coating is not as fluid-tight as a coating resulting from fluid bed encapsulation methods.

The present application claims a leavening ingredient with a microporous lipid coating. The term microporous has been used to describe the coating in order to distinguish it from fluid bed continuous coatings which are substantially continuous and fluid-tight.

The Examiner has cited prior art with a well-known known leavening ingredient sold under the trade name Durkote®. It is well established to those with skill in the art that such coatings are made by fluid bed encapsulation techniques, and this is supported in the accompanying Declaration. Katz therefore does not possess a microporous lipid coating as presently claimed.

Further, the Examiner has made statements about Applicant's representatives which are not supported by the facts. The Examiner states in page 3 of the Office Action:

> **Applicant has not disclosed in the specification how the coating is made to be porous; thus, the porosity must be an inherent property of the coating material. Therefore, if the same coating material is used, it is inherent the same porosity is obtained. Applicant discloses in paragraph [0011] that spray chilling gives a coating that is non-porous; yet, in paragraph [0021], Applicant discloses the microporous lipid coating is formed by spray chilling. Thus, the method of how the coating is made does not give the porosity.**

These statements are not supported by the record, but are apparent misinterpretations by the Examiner. Applicant states in paragraph [0011], "Spray chilling as a coating method has been considered inadequate since the coating resulting therefrom is not substantially continuous and non-porous." Applicant clearly states that the spray chilled coating is **not** substantially continuous **and** non-porous. Applicant is therefore stating that the spray chilled coating is **not** substantially non-porous. This meaning is clear in the context of the sentence as Applicant is stating why a spray chilling coating was considered inadequate.

Furthermore, Applicant describes in detail at paragraph [0023] of the specification how the microporous lipid coating is formed by modified spray chilling techniques. More particularly, Applicant states:

> **In the spray-chilling techniques of the present invention, the particle to be coated is mixed with the coating to form a colloidal suspension. When lipids are utilized as a coating material, heat is applied to the mixture along with a continuous agitation to prevent solidification of the lipid. The mixture is then pumped with pressure through a single nozzle into a closed chamber. The mixture is substantially atomized into a substrate/lipid combination mainly due to**

> **the high pressure combined with the small size of the nozzle. As the atomized combination is propelled into the chamber, a spherical particle will be formed. In the present invention, the atomized combination is propelled in a substantially upward projection. The atomized combination may also be propelled horizontally into the chamber.**

Applicant further states, "The microporous coating is permitted to encapsulate the leavening agent in increased amount because the protection provided by the coating does not create a water-impermeable leavening agent, but rather a 'water-resistive agent' at low temperatures. Whereas previous continuous and non-porous coatings, which are encapsulated by fluid bed techniques, prevent water contact, the present coating merely delays water contact until the optimum time." See paragraph [0026] of the specification.

It is clear from a reading of the specification that the spray chilling techniques give the claimed microporous lipid coating, especially when juxtaposed with the continuous fluid bed coatings in the prior art. A close reading of the specification therefore certainly reveals the method of making the microporous lipid coating, as well as why it is different from the prior art fluid bed coated technology of Katz.

Still further, a thorough reading of Katz reveals that the dough system being used is a refrigerated dough, i.e., one which relies on proofing the dough prior to refrigeration in order to provide a pressure filled container as the dough continues to proof during refrigeration. This technique is commonly used in ready-made muffin compositions and the like which expand

during refrigeration. Katz describes dough compositions and the like which expand during refrigeration.

Katz describes a dough composition in Examples 1-3 which are proofed in temperature ranges of 85-89°F. See, e.g., Example 1, column 3, lines 33-36; Example 2, column 4, lines 14-15; and Example 3, column 5, lines 29-33. In each instance, it is stated that it is desirable that the dough temperature does not reach above 90°F. It is further stated at column 2, lines 44-52 of Katz:

> **In all methods, the object of the invention is to heat the dough to a temperature of 80°-90°F, preferably 85°-88°F. The temperature ranges apply whether the dough is heated before being placed in its container or is heated inside its sealed container. If the dough temperature is substantially higher than 90°F, the dough is damaged with no improvement in proofing.**

While Katz discloses a coating with a melting point substantially higher, the release of the coated leavening agent in Katz is at a range below 90°F. The release of the leavening agent can not be from melting. It is postulated that the release is by an abrasion mechanism. While it is uncertain how the GDL (leavening acid) is released from encapsulation, it is certain that the presently claimed ingredient would not be suitable for the dough composition in Katz as the second hydration (release of the ingredient as disclosed in the specification) is at 95°F.

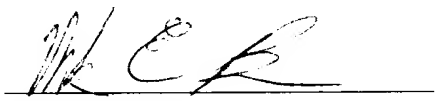
It is clear therefore that claim 20 of the present invention is not anticipated by Katz. Withdrawal and reconsideration of the rejection is respectfully requested.

**SUMMARY**

Based upon the above comments and the accompanying Declaration, the rejections are respectively traversed. Withdrawal and reconsideration are respectfully requested.

Should the Examiner have any questions or comments concerning the above, the Examiner is respectfully invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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